

Eaton Drive, Wrexham

Existing Private Drainage
October 2021



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Client: Enfys Developments Ltd

Report Status: **Final**

Written By: Alicia Allsup

Reviewed By: Adam Caldwell

Approved By: Adam Caldwell

Date: October 2021

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1. INTRODUCTION

In accordance with your instructions, Datrys and Drainbusters NW undertook a CCTV survey of the existing private drainage for the proposed redevelopment site at Eaton Drive, Wrexham on the 24th of September 2021.

The intention of the survey was to identify the connection and discharge locations of the existing drainage with in the site to discharge planning condition 18 of planning reference WRC P/2019/0792.

2. FINDINGS

As illustrated in Appendix A and noted in Appendix B, there are 3 existing foul chambers within the site. All internal sinks and toilets were confirmed via the CCTV survey and dye testing to discharge onto the private foul line with in the site. Along the line from MH3 to MH4, 2nr. 100mm diameter junctions were found. The source of these pipes are unknown but are not believed to be active.

When investigating the Surface Water, 4nr. rainwater gullies were found, 2nr. on either side of the building. Both rainwater gullies on the west of the building were proven to discharge to a trench soakaway located in the grassed verge with in the site. On the east of the building, it was proven via dye testing and CCTV that both gullies connect onto the pipe run between MH2 to MH3, therefore the existing surface water is connecting to the foul network.

3. CONCLUSIONS

Foul: The existing foul is served by the adjacent combined sewer lying within the eastern boundary. There were two unconfirmed pipe runs outwith the enclosure that should be exposed by means of excavation to ascertain if active. These may need to be accommodated in the detailed design if proven to serve anything other than the existing building on site.

Surface water: Half the building is served by what appears to be a trench soakaway whilst the other half drains to the foul sewer. The proposals will look to remove the surface water from the sewer network and introduce it into a surface water drain.

The demolition of the building would not appear to have an adverse affect on the surrounding drainage network.

APPENDIX

APPENDIX A – CCTV MARKUP

APPENDIX B – CCTV REPORT



Project

Project Name: Eaton Road, Wrexham LL13 9BP

Project Date: 9/23/2021

Inspection Standard: MSCC4 Sewers & Drainage GB (SRM4 Scoring)

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Project Information

Project Name
Eaton Road, Wrexham LL13 9BP

Project Number

Project Date
9/23/2021

Client

Company: Datrys
Street: Unit 6 Doc Fictoria
Town or City: Caernarfon
County: Gwynedd
Post Code: LL55 1TH
Phone: 01286 671027

Manager

Company: Kingsley Community Centre
Street: Eaton Drive
Town or City: Wrexham
Post Code: LL13 9BP

Contractor

Company: Drain Busters (NW) Ltd
Contact: Martin Hughes
Street: Greenfield Road
Town or City: Greenfield
County: Flintshire
Post Code: CH8 7GR
Phone: 01352 755405
Mobile: 07709 318516
Email: drainbustersnw@aol.com

Scoring Summary

Project Name
Eaton Road, Wrexham LL13 9BP

Project Number

Project Date
9/23/2021

Structural Defects

- Grade 3: Best practice suggests consideration should be given to repairs in the medium term.
- Grade 4: Best practice suggests consideration should be given to repairs to avoid a potential collapse.
- Grade 5: Best practice suggests that this pipe is at risk of collapse at any time. Urgent consideration should be given to repairs to avoid total failure.

Section	PLR	Grade	Description
1	MH 1X	4	Hole in drain or sewer from 5 o'clock to 7 o'clock
2	MH 2X	3	Multiple defects

Service / Operational Condition

Section	PLR	Grade	Description
All inspected pipes are in an acceptable service condition (< grade 3).			

Abandoned Surveys

Section	PLR	Description
All inspections complete, none are abandoned.		

Information

These scoring summaries are based on the SRM grading from the WRc.

Section Summary

Project Name Eaton Road, Wrexham LL13 9BP	Project Number	Project Date 9/23/2021
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Number of sections	2
Total length of sewer network	1245.20 m
Inspected length of sewer network	1245.20 m
Not inspected length of sewer network	0.00 m
Total abandoned inspections	0
Number of section inspection photos	0
Number of section inspection videos	0
Number of section inspection scans	0
Number of section inclination measurements	0

PLR:	MH 1X	Upstream Node:	MH 1
Inspection Direction:	Downstream	Downstream Node:	MH 2
Inspected Length:	1,234.00 m	Dia/Height:	100 mm
Total Length:	1,234.00 m	Pipe Material:	Vitrified clay pipe (i.e. all clayware)

No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: MH 1
2	0.01	WL	Water level, 5% of the vertical dimension
3	2.97	JN	Junction at 9 o'clock, diameter: 100mm
4	3.36	JN	Junction at 9 o'clock, diameter: 100mm
5	8.56	JN	Junction at 10 o'clock, diameter: 100mm
6	11.54	JDM	Joint displaced, medium
7	11.84	JN	Junction at 9 o'clock, diameter: 100mm
8	12.44	MHF	Finish node type, manhole, reference number: MH 2
9	1234.00	H	Hole in drain or sewer from 5 o'clock to 7 o'clock

PLR:	MH 2X	Upstream Node:	MH 2
Inspection Direction:	Downstream	Downstream Node:	Main
Inspected Length:	11.20 m	Dia/Height:	100 mm
Total Length:	11.20 m	Pipe Material:	Vitrified clay pipe (i.e. all clayware)

No.	m+	Code	Observation
1	0.00	MH	Start node type, manhole, reference number: MH 2
2	0.01	WL	Water level, 5% of the vertical dimension
3	0.20	FC	Fracture, circumferential from 7 o'clock to 11 o'clock
4	2.18	JN	Junction at 9 o'clock, diameter: 100mm
5	4.87	FL	Fracture, longitudinal at 5 o'clock
6	9.01	JN	Junction at 9 o'clock, diameter: 100mm
7	10.41	FL	Fracture, longitudinal at 5 o'clock

Section Summary

Project Name Eaton Road, Wrexham LL13 9BP	Project Number	Project Date 9/23/2021
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No.	m+	Code	Observation
8	11.20	MHF	Finish node type, manhole, reference number: Main

Section Inspection - 9/23/2021 - MH 1X

Section 1	Inspection 1	Date 23/09/21	Time 11:07	Client's Job Ref Not Specified	Weather Not Specified	Pre Cleaned Not Specified	PLR MH 1X
Operator Not Specified		Vehicle VEHICLE 1		Camera Camera 1	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Wrexham	Inspection Direction:	Downstream	Upstream Node:	MH 1
Road:	Eaton Drive	Inspected Length:	1,234.00 m	Upstream Pipe Depth:	
Location:		Total Length:	1,234.00 m	Downstream Node:	MH 2
Surface Type:		Joint Length:	0.00 m	Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:		Dia/Height:	100 mm		
Year Constructed:		Pipe Material:	Vitrified clay pipe (i.e. all clayware)		
Flow Control:		Lining Type:	No Lining		
Inspection Purpose:	Sample survey to determine asset condition		Lining Material:	No Lining	

Comments:

Recommendations:

Scale: 1:10731	Position [m]	Code	Observation	Grade
Depth: m MH 1	0.00	MH	Start node type, manhole, reference number: MH 1	
	0.01	WL	Water level, 5% of the vertical dimension	
	2.97	JN	Junction at 9 o'clock, diameter: 100mm	
	3.36	JN	Junction at 9 o'clock, diameter: 100mm	
	8.56	JN	Junction at 10 o'clock, diameter: 100mm	
	11.54	JDM	Joint displaced, medium	1
	11.84	JN	Junction at 9 o'clock, diameter: 100mm	
	12.44	MHF	Finish node type, manhole, reference number: MH 2	
	1234.00	H	Hole in drain or sewer from 5 o'clock to 7 o'clock: Cement is worn	4
Depth: m MH 2				

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
2	80.0	0.1	81.0	4.0	0	0.0	0.0	0.0	1.0

Section Inspection - 9/23/2021 - MH 2X

Section 2	Inspection 2	Date 23/09/21	Time 11:12	Client's Job Ref Not Specified	Weather No Rain Or Snow	Pre Cleaned Not Specified	PLR MH 2X
Operator Not Specified		Vehicle VEHICLE 1		Camera Camera 1	Preset Length Not Specified	Legal Status Not Specified	Alternative ID Not Specified

Town or Village:	Wrexham	Inspection Direction:	Downstream	Upstream Node:	MH 2
Road:	Eaton Drive	Inspected Length:	11.20 m	Upstream Pipe Depth:	
Location:		Total Length:	11.20 m	Downstream Node:	MAIN
Surface Type:		Joint Length:	0.00 m	Downstream Pipe Depth:	
Use:	Foul	Pipe Shape:	Circular		
Type of Pipe:		Dia/Height:	100 mm		
Year Constructed:		Pipe Material:	Vitrified clay pipe (i.e. all clayware)		
Flow Control:	No flow control	Lining Type:	No Lining		
Inspection Purpose:	Sample survey to determine asset condition	Lining Material:	No Lining		

Comments:
Recommendations:

Scale:	1:98	Position [m]	Code	Observation	Grade																								
Depth: m MH 2 0.00 0.01 0.20 2.18 4.87 9.01 10.41 11.20 Main Depth: m <table><tr><td>MH</td><td>Start node type, manhole, reference number: MH 2</td><td></td></tr><tr><td>WL</td><td>Water level, 5% of the vertical dimension</td><td></td></tr><tr><td>FC</td><td>Fracture, circumferential from 7 o'clock to 11 o'clock</td><td>3</td></tr><tr><td>JN</td><td>Junction at 9 o'clock, diameter: 100mm</td><td></td></tr><tr><td>FL</td><td>Fracture, longitudinal at 5 o'clock</td><td>3</td></tr><tr><td>JN</td><td>Junction at 9 o'clock, diameter: 100mm</td><td></td></tr><tr><td>FL</td><td>Fracture, longitudinal at 5 o'clock</td><td>3</td></tr><tr><td>MHF</td><td>Finish node type, manhole, reference number: Main</td><td></td></tr></table>						MH	Start node type, manhole, reference number: MH 2		WL	Water level, 5% of the vertical dimension		FC	Fracture, circumferential from 7 o'clock to 11 o'clock	3	JN	Junction at 9 o'clock, diameter: 100mm		FL	Fracture, longitudinal at 5 o'clock	3	JN	Junction at 9 o'clock, diameter: 100mm		FL	Fracture, longitudinal at 5 o'clock	3	MHF	Finish node type, manhole, reference number: Main	
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FL	Fracture, longitudinal at 5 o'clock	3																											
MHF	Finish node type, manhole, reference number: Main																												

Construction Features					Miscellaneous Features				
Structural Defects					Service & Operational Observations				
STR No. Def	STR Peak	STR Mean	STR Total	STR Grade	SER No. Def	SER Peak	SER Mean	SER Total	SER Grade
3	40.0	11.5	120.0	3.0	0	0.0	0.0	0.0	1.0

